

REMARKS

The Examiner is thanked for the thorough review of the present application and for indicating the allowability of claims 19-20. New independent claim 21 is presented, which is similar to independent claim 8 but further recites that a portion of the first platform wall is configured to be pressed against a stop of the blade leaf based on a centrifugal force aligned with the blade axis, and that the portion of the first platform wall is aligned at a non-orthogonal angle with respect to the blade axis. Additionally, new independent claim 21 recites that the second platform wall is a continuous extension of the blade leaf. Additionally, new independent claim 21 recites that the first platform wall is made from an elastic material such that the aerodynamic shape is configured to adapt to a flow of working medium on a hot-gas side of the first platform wall and to a flow of cooling medium on a rear side and within a cooling space between the first and second platform wall, wherein the hot-gas side is opposite to the rear side. Support for new independent claim 21 may be found at FIG. 2, page 3 line 34, page 6 lines 1-5, page 10 lines 3-11, and page 10 lines 18-23 of the Substitute Specification, for example. Accordingly, no new matter is presented by new claim 21, per MPEP 608.04.

Claims 11-21 are pending in the present application. The Examiner rejected claims 11-14 and 17 under 35 USC 102 as being anticipated by Tiemann. Additionally, the Examiner rejected claims 11, 12, 14, 16 and 17 under 35 USC 102 as being anticipated by Albrecht. Additionally, the Examiner rejected claim 15 under 35 USC 103 as being unpatentable over Tiemann. Additionally, the Examiner rejected claim 18 under 35 USC 103 as being unpatentable over Albrecht in view of Examiner Contended Admitted Prior Art (ECAPA). Applicants respectfully request reconsideration and allowance of the pending claims in view of the following arguments.

Response to Specification Objection

The Examiner objected to the Abstract, and contended that the Abstract included more than 150 words and various legal terminologies (Office Action, p. 2). As shown above, the Abstract has been amended to cure these deficiencies, and accordingly, this objection should be withdrawn.

The Examiner also objected to the Specification, and helpfully pointed out various portions of the Specification for correction. As shown above, these portions of the Specification have been corrected and accordingly, these objections should be withdrawn.

Response to Claim Objections

The Examiner objected to claims 11 and 13, for minor informalities (Office Action, p. 3). As attached herewith, claims 11 and 13 have been amended, to cure these informalities and accordingly, these objections should be withdrawn. Additionally, the Examiner objected to claims 12-17, based on their dependency on claim 11, and accordingly, these objections should also been withdrawn.

Response to Rejections Under Section 102:

A. Response to Rejection Under Section 102 based on Tiemann

The Examiner rejected independent claim 11 under 35 USC 102 as being anticipated by Tiemann. Independent claim 11 recites a first platform wall arranged along the transition from the blade leaf to the platform that does not structurally support the blade leaf and has along the width of the platform an aerodynamic shape. Additionally, independent claim 11 recites a second platform wall arranged in the platform region that structurally supports and is continuous with the blade leaf and has, along the width of the platform, a set-back step with respect to the first platform. Tiemann fails to disclose these recitations and accordingly, independent claim 11 is patentable over Tiemann.

In rejecting independent claim 11 based on Tiemann, the Examiner contended that element 25 is the recited blade leaf; that element 23 is the recited platform; that element 35 is the recited first platform wall and that element 23 is the recited second platform wall and cited to FIGS. 2-3 in support thereof (Office Action, p. 3-4). Thus, the Examiner argued that element 35 does not structurally support element 25, yet that element 23 somehow does structurally support element 25. Since element 35 and element 23 of Tiemann form the same “overhang 21” (English Abstract), there is no logic to support this argument from the Examiner that element 35 does not structurally support element 25, yet that element 23 somehow does structurally support element 25. Indeed, neither element 23 nor element 35 structurally support element 25. Instead,

element 25 extends continuously past the overhang 21 including the elements 23, 35 and thus is self-supporting. Accordingly, Tiemann fails to disclose the recited language of independent claim 11.

In rejecting independent claim 11 based on Tiemann, the Examiner argued that element 23 is the recited second platform wall, and thus the Examiner argued that element 23 is continuous with element 25. Based on FIGS. 2 and 3, element 23 is not continuous with element 25, and element 25 extends continuously through and beyond the region from where the overhang 21 (including element 23) extends. Thus, element 23 forms part of a non-continuous, detached, overhang 21 which forms an orthogonal angle with the element 25. Indeed, the element 23 is not continuous with the element 25. Accordingly, Tiemann fails to disclose the recited language of independent claim 11.

B. Response to Rejection Under Section 102 based on Albrecht

The Examiner rejected independent claim 11 under 35 USC 102 as being anticipated by Albrecht. Independent claim 11 recites a first platform wall arranged along the transition from the blade leaf to the platform that does not structurally support the blade leaf and has along the width of the platform an aerodynamic shape. Additionally, independent claim 11 recites a second platform wall arranged in the platform region that structurally supports and is continuous with the blade leaf and has, along the width of the platform, a set-back step with respect to the first platform. Albrecht fails to disclose these recitations and accordingly, independent claim 11 is patentable over Albrecht.

In rejecting independent claim 11 based on Albrecht, the Examiner contended that the blade core 16 is the recited blade leaf; that the web plate 15 of the turbine blade is the recited platform; that the cover plate 24 is the recited first platform wall and that the web plate 15 of the turbine blade is the recited second platform wall and cited to FIGS. 2-3 in support thereof (Office Action, p. 5-6). Thus, the Examiner argued that the cover plate 24 does not structurally support the blade core 16, yet that the web plate 15 somehow does structurally support the blade core 16. Since the cover plate 24 and the web plate 15 are positioned in the same transverse plane, there is no logic to support this argument from the Examiner that the cover plate 24 does not structurally support the blade core 16, yet that the web plate 15 somehow does structurally support the blade

core 16. Indeed, neither the cover plate 24 nor the web plate 15 structurally support the blade core 16, since the blade core 16 is structurally supported by the web 14 which is aligned with the blade core 16 for structural support. Accordingly, Albrecht fails to disclose the recited language of independent claim 11.

In rejecting independent claim 11 based on Albrecht, the Examiner argued that the web plate 15 is the recited second platform wall, and thus the Examiner argued that the web plate 15 is continuous with the blade core 16. Based on FIGS. 2 and 3, the web plate 15 is not continuous with the blade core 16. Instead, the blade core 16 extends continuously through and into a region of the web 14. Accordingly, Albrecht fails to disclose the recited language of independent claim 11.

Accordingly, independent claim 11 is patentable over Tiemann and Albrecht. It's dependent claims, which recite yet further distinguishing features, are also patentable and require no further discussion herein.

Response to Rejections Under Section 103:

The Examiner rejected independent claim 18 under 35 USC 103 as being unpatentable over Albrecht in view of Examiner Contended Admitted Prior Art (ECAPA). Independent claim 18 recites a first platform wall arranged along the transition from the blade leaf to the platform that does not structurally support the blade leaf and has along the width of the platform an aerodynamic shape. Additionally, independent claim 18 recites a second platform wall arranged in the platform region that structurally supports and is continuous with the blade leaf and has, along the width of the platform, a set-back step with respect to the first platform. As argued above in response to the rejection of independent claim 11, Albrecht fails to disclose these recitations and accordingly, independent claim 18 is patentable.

In addition to the language above, independent claim 18 recites that the first platform wall is formed from a resilient elastic metal sheet arranged along a transition from the blade profile to the blade platform. The Examiner contended that Albrecht discloses this language and cited to the cover plate 24, as well as col. 1 lines 8-9 in support thereof (Office Action, p. 9). However, this cited portion of Albrecht merely discloses that a "blade jacket" 19 (see FIG. 2) abutting the blade core 16 and "which is provided with air discharge apertures" 32 (see FIG. 1) is

made from a sheet metal. Indeed, this cited portion of Albrecht teaches that the blade jacket 19, not the cover plate 24 is made from a sheet material. Additionally, even if this cited portion disclosed that the cover plate 24 is made from a “sheet metal”, it fails to teach that the cover plate 24 is made from a resilient elastic metal sheet. Furthermore, the cover plate 24 covers the web plate 15, and thus the cover plate 24 of Albrecht further fails to disclose a first platform wall arranged along a transition from the blade profile to the blade platform. Instead, Albrecht teaches a blade jacket 19 arranged along the blade profile and a cover plate 24 arranged along a web plate. Additionally, the Examiner contended that the cover plate 24 of Albrecht has an aerodynamically advantageous curved shape, and in support thereof argued “element 24 is formed along the contour of the blade and thus, has an aerodynamic shape” (Office Action, p. 9). Indeed, the Examiner mischaracterized Albrecht, which plainly discloses that the blade jacket 19, not the cover plate 24, it formed along the contour of the blade. Accordingly, Albrecht fails to disclose the recitations of independent claim 18.

In addition to the language above, independent claim 18 recites that the second platform wall is arranged along a transition from the blade profile to the blade platform. The Examiner misrepresented Albrecht, since the web plate 15 (see FIG. 2) is not arranged along a transition from the blade profile 16 to the web plate 15. Additionally, independent claim 18 recites that the second platform wall has a retaining stop to retain the first platform wall. The Examiner contended that Albrecht discloses that the web plate 15 has a retaining stop to retain the cover plate 24, and cited to col. 2 line 66 – col. 3 line 3 in support thereof (Office Action, p. 9). However, this cited portion merely discloses that the cover plate 24, not the web plate 15, may include a step that extends “beyond the web plate 15” to connect to an adjoining turbine blade. Indeed, neither this portion nor any cited portion of Albrecht discloses that the web plate 15 has a retaining stop to retain the cover plate 24. Accordingly, Albrecht fails to disclose the recitations of independent claim 18.

Accordingly, independent claim 18 is patentable over Albrecht. Its dependent claims, which recite yet further distinguishing features, are also patentable and require no further discussion herein.

New Claim 21

New independent claim 21 is presented herein. None of the cited prior art references, alone or in combination, disclose the recitations of new independent claim 21. Accordingly, new independent claim 21 is patentable.

Conclusion

For at least the foregoing reasons, it is respectfully submitted that any objections and/or rejections set forth in the outstanding Office Action are inapplicable to the present claims. Applicant respectfully requests allowance of the pending claims. No new matter has been added. Please grant any extensions of time required to enter this paper. The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper, including fees for additional claims and terminal disclaimer fee, or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

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